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Washington DC, DC 20043

EXAMINER

SCHWARTZ, DARREN B

ART UNIT	PAPER NUMBER
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2435

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/523,797	Applicant(s) PARK, SEUNG-BAE	
	Examiner DARREN SCHWARTZ	Art Unit 2435	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 August 2009 and 23 October 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 21-40 is/are pending in the application.
- 4a) Of the above claim(s) 33-39 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 21-32 and 40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claims 21-40 remain pending; claims 33-39 were previously withdrawn from consideration. Claims 21-32 and 40 are presented for examination.

Response to Arguments

Applicant's arguments filed 27 August 2009 have been fully considered but they are not persuasive.

1. The Examiner notes Applicant has neglected to respond to all rejections presented in the Office Action dated 28 May 2009. On page 10 of said Office Action, the Examiner rejected claim 21 under 35 U.S.C. 102(e) as being anticipated by Choel-Shin et al (U.S. Pat Pub 2002/0129269 A1). The Examiner further notes PTO-892 includes said reference. Since Applicant has made a *bona-fide* attempt in responding to the prior correspondence. The Examiner addresses all arguments presented by Applicant. Since, Choel-Shin et al (U.S. Pat Pub 2002/0129269 A1) is not addressed, the Examiner sustains the reference and its respective teachings.

2. Applicant argues on page 8 of Remarks, Martino does not disclose, "the matching board moves to allow the certain cell of the matching board to correspond with the first cell of the reference board if the certain cell and the first cell are not already in correspondence with one another."

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The Examiner disagrees and will address further arguments individually. Applicant's dissents on the "row" of symbols of Martino as reading on applicant's matching board & reference board.

In the instant application, Figure 43, elements 61 & 62 respectively teaches the reference board and matching board, respectively. This is further stated in the instant application on page 57, line 19 – page 58, line 3.

The Examiner has properly interpreted the reference board and matching board of Applicant as including, *at least*, a row or array of cells comprising symbols.

3. Applicant argues on page 8 of Remarks, "Martino does not disclose or suggest, 'the matching board moves to allow,' as recited in independent claim 21, but instead appears to merely move a portion of symbols A0-D3 based on a single row or column."

The Examiner disagrees and refers to the rebuttal stated above; the ARRAY of symbols of Martino equates to a row of symbols. Since applicant's boards may be interpreted as a row of cells comprising symbols, the Examiner finds them to be one in the same.

4. Applicant argues on page 9 of Remarks, "Martino merely illustrates cells shifting row by row or column or column. That is, Martino does not disclose or suggest 'the matching board moves to allow the certain cell.'"

The Examiner disagrees. The Examiner agrees with Applicant's interpretation that "Martino merely illustrates cells shifting." The Examiner notes, though, Martino

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teaches shifting a row or ARRAY of symbols left or right as stated in column 5, lines 20-33.

Figure 50 of Applicant's disclosure teaches "the matching 62 is automatically circulated, ... the arrow indicated by the dotted line of the matching board 62 represents a rotation direction" (page 61, line 20 – page 62, line 5).

The Examiner finds the movement of the ARRAY or row of symbols of Applicant and Martino to be one in the same.

5. Applicant argues Martino does not teach nor suggest, "the matching board moves to allow the certain cell of the matching board."

The Examiner disagrees as refers Applicant to the prior rebuttals.

6. Applicant argues on page 9 of Remarks, "the Office Action ... states ... Martino teach[es] 'to correspond with,' as recited in independent claim 21. However, the cited portion of Martino appear to be limited to describing how each of the plurality of KEY SYMBOLS within an ARRAY must be manipulated (row by row or column by column), in order to type in a user's pin."

To the extent the argument of Applicant applies, the Examiner conquers with this assessment of Martino.

Applicant further argues, "Then, Martino verifies whether the KEY STATE within the displayed ARRAY matches a KEY STATE definition."

To the extent the argument of Applicant applies, the Examiner conquers with this assessment of Martino.

Applicant finally argues, "... which is not the same as 'the matching board moves to allow the certain cell of the matching board to correspond with,' as recited in independent claim 21."

Figure 50 of Applicant's disclosure teaches "the matching 62 is automatically circulated, ... the arrow indicated by the dotted line of the matching board 62 represents a rotation direction" (page 61, line 20 – page 62, line 5).

The Examiner finds the movement of the ARRAY or row of symbols of Applicant and Martino to be one in the same.

7. Applicant argues on page 10 of Remarks, "Page 3, line 17 of the Office Action dated May 28, 2009 states that FIGS. 3 and 4 (elements 'C1, D0, A3, C2, A3, C2, and D0") of Martino teaches 'of the reference board,' as recited in independent claim 21. However, the cited portion of Martino appears to be limited to only one array. In other words, there is no second array in Martino for comparing a first cell of the first array to a first cell of a second array."

The Examiner disagrees and notes an ARRAY of symbols, as taught by Martino, has been interpreted as a row of symbols. Figures 3 and 4 respectively teach four rows or ARRAYS of symbols. Martino clearly establishes this in column 5, line 55 – column 6, line 2.

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The fact that the Examiner may not have specifically responded to any particular arguments made by Applicant and Applicant's Representative, should not be construed as indicating Examiner's agreement therewith.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claims 21-24, 26-32 and 40 are rejected under 35 U.S.C. 102(b) as being anticipated by Martino et al (U.S. Pat 5276314 A), as cited in the IDS dated 08 February 2005, hereinafter referred to as Martino.

Re claim 21: Martino teaches a method of inputting a password for authentication (col 3, lines 14-15), the method comprising:

displaying a matching board [Fig 3, elts: D3, A1, D2, B0; Fig 4, elts: B0, D3, A1, D2] comprising a certain cell [Figs 3 & 4, elt: A1] and at least one other cell [Figs 3 & 4, elt D2, for example] and a reference board [Fig 3, elts: C1, D0, A3, C2; Fig 4, elts: A3, C2, C1, D0] comprising a first cell [Figs 3 & 4, elt C2] and at least one other cell [Figs 3 & 4, elt D0] on a user interface (Fig 1, element 106; col 2, lines 46-51); and

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receiving the password corresponding the certain cell of the matching board with the first cell of the reference board comprising a password symbol, to authenticate the received password (col 3, lines 15-50), such that

the matching board moves (col 5, lines 20-33) to allow the certain cell [Fig 3, elt "A1" & Fig 4, elt "A1"] of the matching board [Fig 3, elts "D3,A1,D2,B0" & Fig 4, elts "B0,D3,A1,D2"] to correspond with the first cell [Fig 3, elt "C2" & Fig 4, elt "C2"] of the reference board [Fig 3, elts "C1,D0,A3,C2" & Fig 4, elts "A3,C2,C1,D0"] if the certain cell and the first cell are not already in correspondence with one another (Fig 3, rows two and three are manipulated until, Fig 4, elts A1 & C2 are in proper "correspondence" with one another, thus forming the users KEY STATE; col 5, lines 55-56; col 5, lines 61-64).

Re claim 22: Martino teaches the receiving comprises receiving the password corresponding to a combination of the certain cell [Fig 3, elt "A1" & Fig 4, elt "A1"] of the matching board [Fig 3, elts "D3,A1,D2,B0" & Fig 4, elts "B0,D3,A1,D2"] matched by the user with the first cell of the reference board [Fig 3, elts "C1,D0,A3,C2" & Fig 4, elts "A3,C2,C1,D0"] having the password symbol [Fig 3, element C2 and Fig 4, element C2] (col 5, line 55 - col 6, line 2), and the certain cell [Fig 3, element C2 and Fig 4, element C2] of the matching board [Fig 4, elements: D3,A1,D2,B0] matched by the user with a second cell of the reference board comprising a second password symbol (Fig 4, elements: A1, C2, D1: col 5, lines 59-64).

Re claim 23: Martino teaches the displaying comprises displaying the matching board [Fig 3, elements: D3, A1, D2, B0; Fig 4, elements: B0, D3, A1, D2] comprising a

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plurality of cells and the reference board [Fig 4, elements: A3, C2, C1, D0] comprising a plurality of cells (Figures 3 and 4), and

one or more other cells of the matching board is matched with corresponding one or more cells of the reference board comprising a symbol, concurrently with matching of the certain cell of the matching board with the first cell of the reference board having the password symbol, so as to prevent revealing of a symbol of the cell of the reference board matched with the certain cell of the matching board as the password symbol of the user (col 2, lines 20-31; col 3, lines 14-29).

Re claim 24: Martino teaches removing one of the matching board and the reference board after a predetermined time from displaying the matching board and the reference board (col 5, lines 1-3 and lines 16-19).

Re claim 26: Martino teaches one of the matching board [Fig 3, elements: D3, A1, D2, B0; Fig 4, elements: B0, D3, A1, D2] and the reference board [Fig 4, elements: A3, C2, C1, D0] is moved with respect to the other so as to place the cells of the matching board adjacent to and match with the cells of the reference board (col 6, lines 3-10).

Re claim 27: Martino teaches:

the displaying of the reference board [Fig 4, elements: A3, C2, C1, D0] comprises displaying a first reference board comprising a plurality of cells having respective symbols, the first reference board including the first cell having a symbol which is the password symbol of the user, and a second reference board [consider Fig 3, elements: A2, B3, C0, D1 and fig 4, elements: D1, A2, B3, C0] comprising a plurality

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of cells having respective symbols, the second reference board including a symbol which is a second password symbol [Fig 3, element D1 and Fig 4, element D1] of the user (Figures 3 and 4; col 5, lines 20-33),

the displaying of the matching board comprises displaying the matching board comprising the plurality of cells having respective symbols, the matching board including the certain cell having a symbol private to the user (col 5, lines 4-19), and

the first and second reference boards [Fig 3, elements: D3, A1, D2, B0, C1, D0, A3, C2] are moved with respect to the matching board so as to line up the password symbol and the second password symbol with the symbol of the matching board private to the user to enter the password (col 5, line 55 – col 6, line 10).

Re claim 28: Martino teaches one of the matching board and the reference board is moved with respect to the other so as to overlap to match the cells of the matching board with the cells of the reference board (col 5, lines 4-19 and col 6, lines 3-10).

Re claim 29: Martino teaches the displaying of the reference board comprises displaying the reference board [Fig 4, elements: A3, C2, C1, D0] comprising the plurality of cells having respective symbols (Abstract), the reference board [Fig 4, elements: A3, C2, C1, D0] including the first cell having a symbol which is the password symbol [Fig 4, element: C2] of the user (col 5, lines 55-64),

the displaying of the matching board comprises displaying the matching board comprising the plurality of cells having respective symbols, the matching board including the certain cell having a symbol private to the user (Figures 3 and 4; col 5, lines 55-67), and

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the matching board is moved with respect to the reference board so as to overlap the cells of the matching board with the cells of the reference board, including the certain cell of the matching board having the symbol private to the user being overlapped with the first cell of the reference board having the password symbol to enter the password (col 5, line 55 – col 6, line 10).

Re claim 30: Martino teaches:

the displaying of the reference board [Fig 4, elements: A3, C2, C1, D0] comprises displaying the reference board [Fig 4, elements: A3, C2, C1, D0] comprising a plurality of cells having respective symbols [Fig 4, elements: A3, C2, C1, D0], the reference board [Fig 4, elements: A3, C2, C1, D0] including the first cell having a symbol which is the password symbol of the user (col 5, lines 55-64),

the displaying of the matching board comprises displaying the matching board comprising a plurality of cells having respective symbols, the matching board including the certain cell having a symbol private to the user (Figures 3 and 4; col 5, lines 55-67), and

the receiving of the password comprises receiving a password corresponding to a combination of the symbol of the matching board private to the user and the password symbol of the reference board privy to the user (Abstract; col 3, lines 30-50; col 5, lines 55-67).

Re claim 31: Martino teaches the displaying of the reference board [Fig 4, elements: A3, C2, C1, D0] further comprises displaying a second reference board [Fig 3, elements: A2, B3, C0, D1 and Fig 4, elements: D1, A2, B3, C0] comprising a plurality

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of cells having respective symbols, the second reference board [Fig 3, elements: A2, B3, C0, D1 and Fig 4, elements: D1, A2, B3, C0] including a cell having a second password symbol privy to the user [Fig 3, element D1 and Fig 4, element D1] (Abstract; col 3, lines 30-50; col 5, lines 55-67),

the displaying of the matching board further comprises displaying a second matching board comprising a plurality of cells having respective symbols, the second matching board including a cell having a second symbol private to the user (Abstract; col 3, lines 30-50; col 5, lines 55-67), and

the receiving of the password comprises receiving a password corresponding to a combination of the symbol private to the user and the password symbol, and a combination of the second symbol private to the user and the second password symbol (Abstract; col 3, lines 14-50).

Re claim 32: Martino teaches wherein one or more other cells of the matching board [Fig 3, elements: D3, A1, D2, B0; Fig 4, elements: B0, D3, A1, D2] is matched with corresponding one or more cells of the reference board [Fig 4, elements: A3, C2, C1, D0], concurrently with matching of the certain cell of the matching board with the cell of the reference board having the password symbol, so as to prevent revealing of the symbol of the cell of the reference board matched with the certain cell of the matching board as the password symbol of the user (col 2, lines 20-31; col 3, lines 14-29).

Re claim 33: Martino teaches one or more other cells of the matching board [Fig 3, elements: D3, A1, D2, B2; Fig 4, elements: B0, D3, A1, D2] is matched with

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corresponding one or more cells of the reference board [Fig 3, elements: C1, D0, A3, C2 and Fig 4, elements: A3, C2, C1, D0], concurrently with matching of the certain cell of the matching board with the cell of the reference board having the password symbol (col 5, lines 55-64), so as to prevent revealing of the symbol of the cell of the reference board matched with the certain cell of the matching board as the password symbol of the user (Abstract; (col 2, lines 20-31; col 3, lines 14-29).

Re claim 40: Martino teaches the symbols are one of numbers, characters, graphics, pictures, and a combination thereof (Figures 3 and 4 teach a display containing letters and numbers; col 6, lines 3-10).

9. Claim 21 is rejected under 35 U.S.C. 102(e) as being anticipated by Cheol-Shin et al (U.S. Pat Pub 2002/0129269 A1), hereinafter referred to as Cheol.

Re claim 21: Cheol teaches a method of inputting a password for authentication, the method comprising:

displaying a matching board [Figs 8a & 8b, elts: a², b², c², d², e², f², g², h², i², j², k², l²] comprising a certain cell [Figs 8a & 8b, elt: e²] and at least one other cell [Figs 8a & 8b, elt: a² for example] and a reference board [Figs 8a & 8b, elts: 1², 2², 3², 4², 5², 6², 7², 8², 9², 0², *², #²] comprising a first cell [Figs 8a & 8b, elt: 5² for example] and at least one other cell [Figs 8a & 8b, elt: 5² or 6² for example] on a user interface [Figs 8a & 8b: ¶42] (¶85); and

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receiving the password corresponding the certain cell of the matching board with the first cell of the reference board comprising a password symbol, to authenticate the received password (¶86-¶87), such that

the matching board moves to allow the certain cell of the matching board to correspond with the first cell of the reference board if the certain cell and the first cell are not already in correspondence with one another (¶89-¶92).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Martino et al (U.S. Pat 5276314 A), as cited in the IDS dated 08 February 2005, hereinafter referred to as Martino, in view of Pimpo (U.S. Pat 6021653 A), hereinafter referred to as Pimpo.

Re claim 25: Martino teaches the reference board is refreshed to display the one or more cells so as to match the cells of the matching board with the cells of the reference board (col 5, lines 20-33 and lines 55-67).

However, Pimpo teaches:

the response to the one or more cells of the reference board [Fig 1, ring: LMN] corresponding to the one or more other cells of the matching board [Fig 1, ring: OPQ]

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not being displayed where one of the matching board and the reference board is moved with respect to the other (Fig 1; col 5, lines 52-66; the Examiner notes the tumbler rings as shown in Figures 1, 3 and 6 contain one or more cells that are not being displayed when the board are moved with respect to the other).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the teachings of Martino with the teachings of Pimpo, for the purpose of providing rotating dials on a user interface while best utilizing the user interface.

Conclusion

Examiner's Note: Examiner has cited particular columns and line numbers in the references applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the text of the passage taught by the prior art or disclosed by the examiner.

In the case of amending the claimed invention, Applicant is respectfully requested to indicate the portion(s) of the specification which dictate(s) the structure relied on for proper interpretation and also to verify and ascertain the metes and bounds of the claimed invention.

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THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **DARREN SCHWARTZ** whose telephone number is (571)270-3850. The examiner can normally be reached on 7am-4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Vu can be reached on (571)272-3859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/D. S./

Examiner, Art Unit 2435

/Kimyen Vu/

Supervisory Patent Examiner, Art Unit 2435